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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/602,720

06/25/2003

John T. Moore

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7590

08/25/2004

DICKSTEIN SHAPIRO MORIN & OSHINSKY LLP

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EXAMINER

HOANG, HUAN

ART UNIT

PAPER NUMBER

2818

DATE MAILED: 08/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/602,720

Applicant(s)

MOORE ET AL.

Examiner

Huan Hoang

Art Unit

2818

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-68 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 7, 10, 15, 23, 26, 31, 33, 36, 38, 41, 43, 47, 48, 52-54, 59, 66 and 67 is/are rejected.
- 7) ☒ Claim(s) See Continuation Sheet is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>0704,0304&1103</u> . | 6) <input type="checkbox"/> Other: ____ |

Continuation of Disposition of Claims: Claims objected to are 3-6,8,9,11-14,16-22,24,25,27,29,30,32,34,35,37,39,40,42,44-46,49-51,55-58,60-65 and 68.

DETAILED ACTION

Claim Objections

1. Claims 9 and 14 are objected to because of the following informalities:

The phrase "write erase pulse" (claims 9 and 14, line 1) should be "erase pulse".

Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 2, 7, 10, 15, 23, 26, 28, 31, 33, 36, 38, 41, 43, 47, 48, 52-54, 59, 66 and 67 are rejected under 35 U.S.C. 102(e) as being anticipated by Parkinson et al..

Parkinson et al. discloses a method and a memory device having all the steps as recited in claims 1, 2, 7, 10, 15, 23, 26, 28, 31, 33, 36, 38, 41, 43, 47, 48, 52-54, 59, 66 and 67 as follows:

- categorizing a variable resistance memory cell as being in either an "on" state (crystalline state, Fig. 4) or an "off" state (amorphous state, Fig. 4) based on resistance level of the memory cell;

- if the memory cell is categorized as being in the "on" state, determining if the resistance level of the memory cell is outside a predetermined resistance range for the "on" state (from the bottom of the line to 602, Fig. 4);
- if the memory cell is categorized as being in the "off" state, determining if the resistance level of the memory cell is outside a predetermined resistance range for the "off" state (from 609 to the arrow, Fig. 4);
- applying a reset pulse to the memory cell (column 5, line 7) to restore an original resistance profile of the memory cell if the condition tested in either b) or c) is determined to exist in the memory cell (column 4, lines 58 to column 5, line 23);
- the memory cell being a PCRAM (column 2, lines 25-26).

Allowable Subject Matter


4. Claims 3-6, 8, 9, 11-14, 16-22, 24, 25, 27, 29, 30, 32, 34, 35, 37, 39, 40, 42, 44-46, 49-51, 55-58, 60-65 and 68 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 3-6, 8, 9, 11-14, 16-22, 24, 25, 27, 29, 30, 32, 34, 35, 37, 39, 40, 42, 44-46, 49-51, 55-58, 60-65 and 68 recite various features that are not found in the prior art.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huan Hoang whose telephone number is (571) 272-1779. The examiner can normally be reached on Mon-Fri 8:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David C Nelms can be reached on (571) 272-1787. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Huan Hoang
Primary Examiner
Art Unit 2818

HH
8/19/04.